- Existing/Proposed Pavement
- Traffic Barriers
- Drainage features
- Landscaping
- Signals/Signing/Lighting/Striping
- Interchange/Intersection configurations
- ITS Facilities
- Structural clearances - horizontal, vertical
- Proposed Structural needs, including clearances (horizontal, vertical) and deck deficiencies which need to be addressed, etc.
- Bridge approaches and railings
- Structural physical condition (from inspection report)
- Advisability of acquiring a fee interest in lands beneath any proposed structures
- Structural profile/geometry
- Walls
- Waterway openings
- Environmental constraints - permit requirements, who will get the permits?, etc.
- Noise requirements - should a study be done?
- Local Commitments/Public Involvement
- Maintenance features
- Traffic Control (including night work)
- Jurisdiction
- Utilities/Railroads
- Access
- Constructability - traffic control, detours, temporary signals, etc.
- QA/QC Guidelines

Project Scoping is a TEAM effort. Therefore, it becomes critical that all scope team members thoroughly evaluate a project and fully participate in both the screening and scoping process. Post Scoping changes to the scope of work will be strictly controlled by the Project Manager. Changes to the project scope must be approved by the Change Control Board as described in Section 4.7.

At the scope meeting, supervised by the BPSD and the Project Manager, the scope team shall utilize the items listed above, along with information from the NJDOT GIS system and the most recent road and/or bridge plans and videolog, if available. If deemed necessary, the Bureau of Environmental Support Services will provide information as to the proximity of major wetlands, potential cultural resources, significant hazardous sites, Green Acres properties, etc.

Step 1D: Project Screening Products

Through input provided by the Scope Team by the end of Project Screening, the BPSD, in consultation with the Project Manager, will have identified the elements to be considered during scoping.

Also, with input from the Scope Team, the BPSD shall identify the appropriate design standards which shall be utilized throughout the project development process:

1. All Local Highway projects shall follow the standards as referenced in 23 CFR 625, Federal-Aid Policy Guide (see Attachment 3).

2. Interstate projects shall follow 23 CFR 625 or controlling design elements. Non-controlling design elements should conform to the NJDOT Design Manual Roadway and the NJDOT Design Manual Bridges and Structures (refer to Appendix for a listing of controlling design elements). An exception to the above is 23 CFR 625.4(2), where for interstate resurfacing projects the designer must utilize the currently approved design standard, not the AASHTO standard that was in effect at the time of original construction.

3. Non Interstate New Construction and Reconstruction projects shall follow the NJDOT Design Manuals.

4. Non Interstate Resurfacing, Restoration and Rehabilitation (3R) projects shall follow the NJDOT Design Manuals in conjunction with Appendix.

It is extremely important to note that design standards reflect specific criteria recommended for use in design and typically range from minimum to desirable values. The BPSD and the Project Manager should consider, when appropriate, lesser values which, when applied, will satisfy the Project Need and provide additional benefits justifying their use. It is particularly important that the Project Manager fully participate, and concur, in any decision to select design criteria which depart from the applicable Department standard.

Step 2: Development of Project Schemes

During this phase, the schemes which address the Project Need and are consistent with environmental, community and budget constraints are developed for further assessment.

Potential schemes must first be evaluated in light of community support, environmental impacts, and financial constraints. If warranted, an optimum scheme which fully meets all design criteria, and achieves Level of Service C or better, is developed. More than one scheme that fully meets the above goals may exist. If so, environmental sensitivities, access impacts, cost estimates, and other factors may be used to evaluate optimum schemes. If environmental impacts, community opposition, or other constraints obviously preclude the implementation of an optimum scheme, engineering resources invested in its development will be kept to a minimum. The elimination of all potential schemes on this basis will be documented by the BPSD for the record. This documentation will prove invaluable should it be required for the justification of a Design Exception or Alternative Analysis required during Final Scope Development.

Schemes which fully address project goals will be overlaid on the environmental sensitivities, using existing GIS files and other baseline information gathered during Concept Development. If conflicts are identified, then a full range of design and alignment alternatives will be considered, including ones which back off desirable standards and instead meet minimum standards. Consideration of dropping below minimum standards could be warranted, and will be weighed against environmental, economic, access or other benefits. Consideration may also be given to alternatives that do not achieve one or more of the project goals identified in the Project Need.

PROJECT SCOPING CHECKLIST

BUREAU OF STRUCTURAL ENGINEERING

General information (bring to scoping meeting)

		Available	Unavailable
1	Latest Inspection Report		
2	Latest Structural Inventory & Appraisal Sheet		
3	Latest Deck Condition Survey Report		
4	Latest Scour Report		
5	Problem Statement		
6	Plans/As-Builts of Existing Structures		
7	Sample Agreement (if new Consultant and Str. Proj. Mgt. Lead)		
8	Other Known Structure Reports or Info		
9	List of other Structures or Known Projects in the Vicinity		
10	Manhour Estimate Disk		
11	Assessment of current use of lands located beneath proposed overhead structures		
12	Other		

PROJECT SCOPING CHECKLIST

BUREAU OF STRUCTURAL ENGINEERING (CON'T)

Structural Scope:

		No Work Req.	Remove	Repair	Replace	Modify/Widen	New
1	Parapet/Railing						
2	Sidewalk						
3	Deck						
4	Deck Joints						
5	Deck Overlay						
6	Cathodic Protection						
7	Superstructure						
8	Bearings						
9	Abutments						
10	Pier						
11	Wingwalls						
12	Footings						
13	Piles						
14	Embankment/Slope Protection						
15	Electrical						
16	Str. Drainage						
17	Utility Supports						
18	Bridge Mtd. Signs						
19	Chain Link Fence						
20	Safety and Substandard Roadway Features near the Bridge (i.e. Guide Rail Attachments)						
21	Other						
22	Retaining Walls						
23	Culverts						
24	OHSS or Cantilevers						
25	Sound Barriers						
26	Deck Patching Guidelines						
27	Approach Roadway						

PROJECT SCOPING CHECKLIST

BUREAU OF STRUCTURAL ENGINEERING (CON'T)

Comments:

_____

_____

_____

_____

_____

_____

_____

1. Project Procedure: 3R 100% State Full Oversight
   Alternate Procedures

2. Proposed Bridge Cross-Section: _____

3. Min. Req. Vertical Underclearance: _____

4. Min. Req. Horizontal Underclearance: _____

5. Project Limits:
   _____

6. Potential Structural vs. Utility Conflicts (describe):

   _____

7. Potential R.O.W. or Easements required for Structural Work and determination of need to acquire fee interest in lands beneath overhead structure will be made by Structural Engineering and Bureau of Right of Way:

   _____

   _____

8. Environmental Constraints:

PROJECT SCOPING CHECKLIST

BUREAU OF STRUCTURAL ENGINEERING (CON'T)

9. Structural Work Compatibility with Traffic Staging:

_____

_____

10. Constructability/Accessibility:

_____

_____

11. Other Concerns:

_____

_____

_____